

PROIECTIE IN PLAN / PLAN VIEW (Scala / Scale 1:10,000)

| MATCH POINT START |            | MATCH POINT END |            |
|-------------------|------------|-----------------|------------|
| X                 | Y          | X               | Y          |
| 294,574.30        | 952,793.57 | 297,728.18      | 949,010.52 |

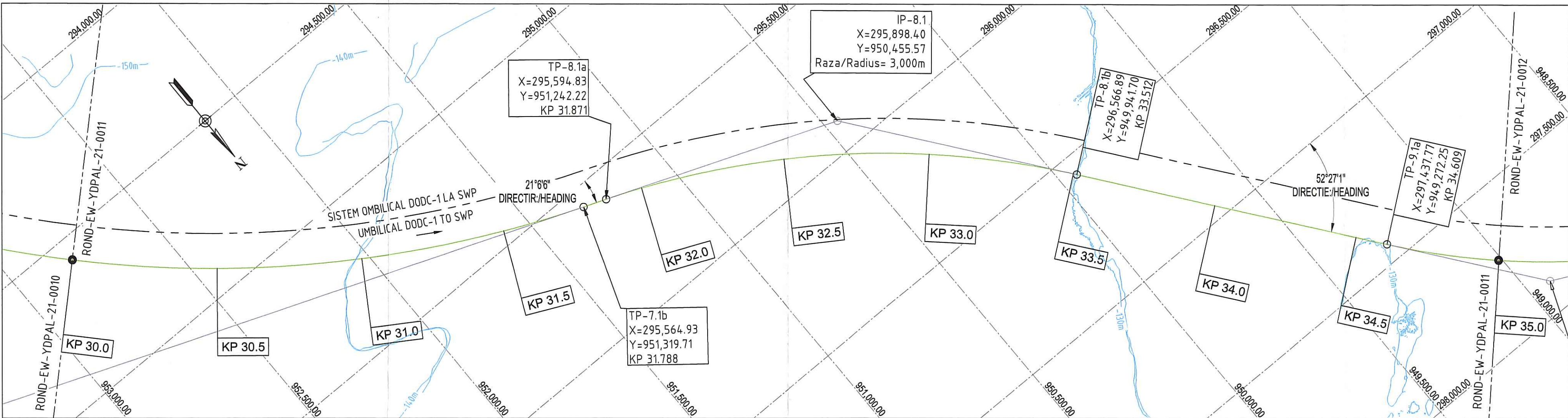
| PUNCT LEGATURA DE INCEPUT |            | PUNCT LEGATURA DE FINAL |            |
|---------------------------|------------|-------------------------|------------|
| X                         | Y          | X                       | Y          |
| 294,574.30                | 952,793.57 | 297,728.18              | 949,010.52 |

## LEGENDA / LEGEND

- CONDUCTA DE ADUCTIUNE DOMINO / DOMINO FLOWLINE
- SISTEM OMBILICAL DOMINO / DOMINO UMBILICAL
- PROFIL FUNDUL MARII / SEABED PROFILE

NOTA:  
Sistem Omibilical - Ansamblu de conductori electrici, fibra optica, conducte hidraulice, conducte injectie chimicale, etc. intr-un invelis metalic comun.

NOTE:  
Umbilical - Assembly of electrical conductors, fiber optics, hydraulic lines, chemical injection pipes, etc. in a common metallic coating.

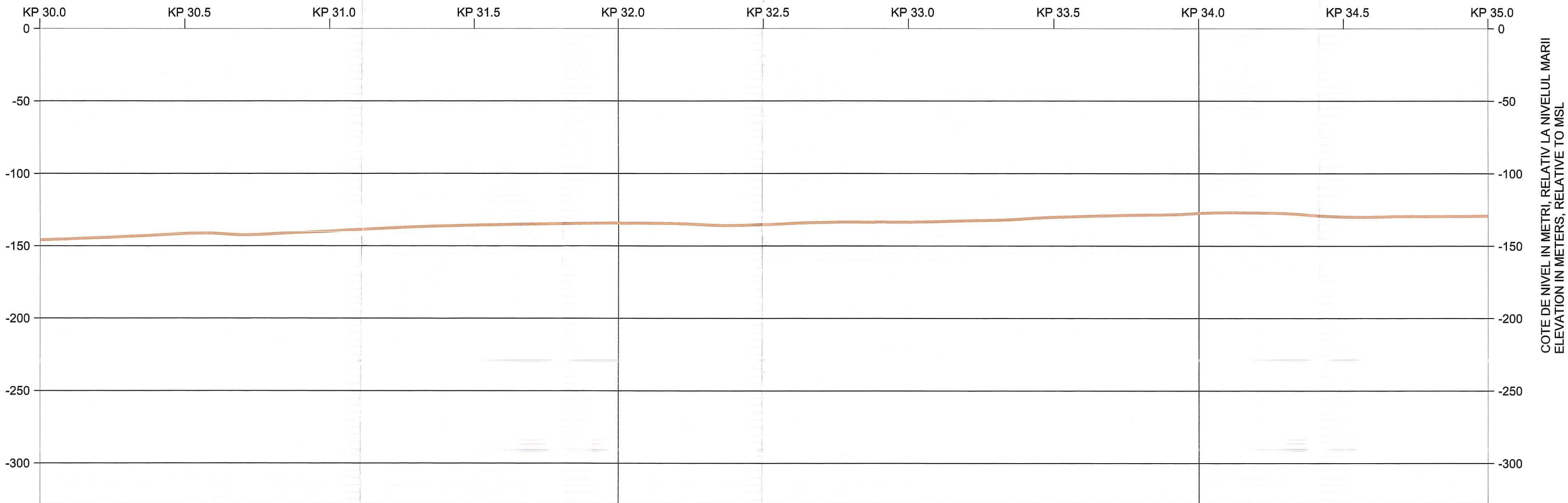


## PROFIL LONGITUDINAL CONDUCTA / LONGITUDINAL PROFILE ALONG PIPELINE

**ACRONIME**  
 TP - PUNCT SCHIMBARE DIRECTIE  
 KP - POZITIE KILOMETRICA (CONDUCTA)  
 IP - PUNCT INFLEXIUNE

## ACRONYMS

TP - TURN POINT  
KP - KILOMETRIC POINT  
IP - INFLEXION POINT



|                                             |            |
|---------------------------------------------|------------|
| SCALA ORIZZONTALE / HORIZONTAL SCALE        | 1 : 10,000 |
| SCALA VERTICALE / VERTICAL SCALE            | 1 : 1,000  |
| EXAGERARE VERTICALE / VERTICAL EXAGGERATION | 5          |

## DATE TEHNICE / ENGINEERING DATA

| ELEMENTE TRASEU                            | ORIENTARE (°N) / RAZA DE CURBURA (m)                           |  | ROUTE ITEMS                     | STRAIGHT HEADING (°N) / BEND RADIUS (m)                      |  | 4,000 | 21° 6' 6" | 3,000 | 52° 27' 1" | 2,500 |
|--------------------------------------------|----------------------------------------------------------------|--|---------------------------------|--------------------------------------------------------------|--|-------|-----------|-------|------------|-------|
|                                            | TRAVERSARE CABLU/CONDUCTA                                      |  |                                 | CABLE / PIPELINE CROSSING                                    |  |       |           |       |            |       |
|                                            | TIP SOL LA SUPRAFATA FUNDULUI MARII                            |  |                                 | SURFACE SEA BED SOIL                                         |  |       |           |       |            |       |
| DATE CONDUCTA                              | TIP OTEL / D. EXT. (mm) / GROSIME PERETE (mm)                  |  | PIPELINE DATA                   | STEEL GRADE / O.D. (mm) / WALL THICKNESS (mm)                |  |       |           |       |            |       |
|                                            | GROSIME PERETE DISP. ANTIDIFORMARE(mm)/ INTERVAL (m)           |  |                                 | BUCKLE ARRESTOR W.T. (mm) / SPACING (mm)                     |  |       |           |       |            |       |
|                                            | STRAT ANTI-COROZIV/GROSIME(mm)/DENSITATE(kg/m <sup>3</sup> )   |  |                                 | ANTI-CORR. COAT / THICK (mm) / DENSITY (kg/m <sup>3</sup> )  |  |       |           |       |            |       |
|                                            | STRAT TERMOIZOLANT/GROSIME (mm)/DENSITATE (kg/m <sup>3</sup> ) |  |                                 | EXT. THER. INS. COAT/THICK (mm)/DENSITY (kg/m <sup>3</sup> ) |  |       |           |       |            |       |
|                                            | STRAT BETON / STRAT INTERIOR PROTECTIE                         |  |                                 | CONCRETE COATING / INTERNAL COATING                          |  |       |           |       |            |       |
|                                            | TIP SUDURA/TIP UMPLUTURA/DENSITATE (kg/m <sup>3</sup> )        |  |                                 | FIELD JOINT TYPE / INFILL / DENSITY (kg/m <sup>3</sup> )     |  |       |           |       |            |       |
|                                            | TIP ANOD PROTECTIE / INTERVAL PLASARE (NR. DE SEGMENTE)        |  |                                 | ANODE BRACELETS TYPE / SPACING (joints)                      |  |       |           |       |            |       |
|                                            | GREUTATE CONDUCTA (kN/m)                                       |  |                                 | PIPELINE WEIGHT (kN/m)                                       |  |       |           |       |            |       |
|                                            | IN AER (USCATA) (kN/m)                                         |  |                                 | IN AIR (DRY) (kN/m)                                          |  |       |           |       |            |       |
|                                            | IN APA                                                         |  |                                 | SUBMERGED                                                    |  |       |           |       |            |       |
| DATE INCALZIRE ELECTRICA DIRECTA (NOTE 13) | D. EXT. (mm)                                                   |  | DEH DATA (NOTE 13)              | O.D. (mm)                                                    |  |       |           |       |            |       |
|                                            | GREUTATE CABLU DEH (kN/m)                                      |  |                                 | IN AIR (DRY) (kg/m)                                          |  |       |           |       |            |       |
|                                            | IN AER (USCATA) (kg/m)                                         |  |                                 | SUBMERGED (kg/m) / SG                                        |  |       |           |       |            |       |
|                                            | IN APA (kg/m) / SG                                             |  |                                 | FUNCTIONARE (kN/m) / SG                                      |  |       |           |       |            |       |
|                                            | TIP LEGATURI/NR. DE LEGATURI PE SEGMENT                        |  |                                 | TYPE OF STRAP/No. OF STRAPS PER JOINT                        |  |       |           |       |            |       |
|                                            | ADANCIME DRAGARE (m) / LATIME (m)                              |  |                                 | DREDGING DEPTH (m) / WIDTH (m)                               |  |       |           |       |            |       |
|                                            | SUPPORTI/ SALTELE                                              |  |                                 | SLEEPERS / MATTRESSES                                        |  |       |           |       |            |       |
|                                            | ADANCIME SANT (m)                                              |  |                                 | TRENCHING DEPTH (m)                                          |  |       |           |       |            |       |
|                                            | TIP UMPLUTURA / INALTIME STRAT ACOPERIRE (m)                   |  |                                 | BACKFILLING TYPE / COVER TOP (m)                             |  |       |           |       |            |       |
|                                            | DEPUNERE AGREGAT/PIETRIS                                       |  |                                 | GRAVEL DUMPING                                               |  |       |           |       |            |       |
| LUNGIME TRONSON ADMISA                     | INSTALARE (m)                                                  |  | ALLOWABLE SPAN LENGTH (NOTE 12) | INSTALLATION (m)                                             |  |       |           |       |            |       |
|                                            | HYDRO-TEST (m)                                                 |  |                                 | HYDROTEST (m)                                                |  |       |           |       |            |       |
|                                            | FUNCTIONARE (m)                                                |  |                                 | OPERATION (m)                                                |  |       |           |       |            |       |
| CERINTE SPECIFICE                          | TOLERANTA LA INSTALARE (+/-m)                                  |  | SPECIFIC REQUIREM.              | LAY TOLERANCE (+/-m)                                         |  |       |           |       |            |       |
|                                            | ALTELE                                                         |  |                                 | OTHER                                                        |  |       |           |       |            |       |

SE APLICA PREVEDERILE PRIVIND CONFIDENTIALITATEA IN CONTRACTUL DE CONCESIUNE NEPTUN DEEP SI A  
CONTRACTULUI DE OPERATIUNI COMUNE AFERENT SI/SAU CONTRACTORUL DE CONFIDENTIALITATE APPLICABIL  
IN NUMELE EXXONMOBIL EXPLORATION AND PRODUCTION ROMANIA LIMITED.

## NOTE

1. DACA NU SE PRECIZEAZA ALTFEL TOATE DIMENSIUNILE SUNT EXPRIMATE IN METRI.
2. TOATE COȚELE DE NIVEL SUNT IN METRI, RELATIV LA NIVELUL MARI.
3. DATELE BATIMETRICE PROVIN DIN BAZA DE DATE GEOTINICE SI GEOFIZICE GSI ACTUALIZATE IN 2014, DOCUMENT FUGAT - 31135-8-001003. PENTRU PROIECTUL NEPTUN DEEP, BATIMETRIA PENTRU ACESUL LA LOCATA PLATFORMA F A FOST ACTUALIZATA PRIN DOCUMENTUL FUGAT 64024-V3 (2017)
4. DATELE SEPRER SOLIDE DE PE FUNDUL MARI PROVIN DIN RAPORTUL INTEGRAT NEPTUN DEEP - ROND-W-GRPT-00-005-001 SI A SE VEDEA DOCUMENTUL CU NUMARUL ROND-W-YBDM-20-0002 PENTRU DATE DESPRE SOL LA LOCATA PLATFORMA IDENTIFICATE CA MASURATORILE FUGAT PROIECT 2017.
5. ORIENTARILE REALIZATE DUPA NOROUL STEREO 70.
6. PENTRU DATELE PRIVIND LEGATURILE CU PLATFORMA SI LA LOCATA SONDELOR SUBMARINE VEZI DOCUMENTELE - ROND-W-YD-VL-22-0012, ROND-W-YD-VL-22-0005 SI ROND-W-YD-VL-22-0012.
7. PORTIUNILE CONDUCTIE DE ADUCTIUNE SITUATE IN AFARA SANTULUI SI IN APRETERA MOSURULUI PLACUTE DE PRODUCTIE, VOR FI PROTEJATE CU SATELITE.
8. DISTANTA MINIMA INTRE CONDUCTIE DE ADUCTIUNE SI SISTEMUL OMBILICAL ESTE DE 100m.(NOMINAL)20m. INDELAZAND TOLERANTELE DATORITA CERINTELOR INCALZIRII CONDUCTIEI.
9. PENTRU POZITIA SI CONFIGURATIA INIATORULUI DE CURBURA VEZI DOCUMENT ROND-W-YL-2012-0012 / 0013.
10. PENTRU DATELE PRIVIND LUCRUL DE PRE-INTERVENTIE, LEGATE DE PROFILUL SANTULUI CONSULTATI DOCUMENT ROND-W-YDPL-X-21-0003-0004.
11. SE VA CONFIRMA GROSIMEA NECESARA PENTRU IZOLATIE CONFORM FISA DE VERIFICARE A PROIECTULUI IZOLAREA ROND-W-YSTD-21-0002.
12. SE VA CONFIRMA RATA DE DEZGHEC SI DEZGHECUL PENTRU PROIECTUL ROND-W-YSTD-21-0002.
13. SE VA CONFIRMA PROPRIETATEA INCALZIRII ELECTRICE DIRECTE DEZGHECUL IN PROIECTUL DETALIAI.
14. NU ESTE APPLICABIL IN CAZUL CONDUCTIE INGRAPATE.
15. TIPIUL DE ULMPLUTURA VA FI CONFIRMAT IN PROIECTUL DETALIAI.

## NOTES

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
2. ALL ELEVATIONS ARE IN METERS AND RELATIVE TO MSL.
3. BATHYMETRY DATA FROM 2014 GEOTECHNICAL AND GEOPHYSICAL GIS DATABASE UPDATE, FIGURO DOCUMENT 31135-0-001(03) FOR THE NEPTUN DEEP DEVELOPMENT. PLATFORM LOCATION APPROACH BATHYMETRY UPDATED BY FIGURO DOCUMENT 160424.73 (2017).
4. SEABED SLOPE DATA FROM NEPTUN DEEP INTEGRATED REPORT, ROND-W-GRPT-00-005-001.
5. SEABED SLOPE DATA FROM ROND-W-YDAL-2002-0002 FOR PLATFORM LOCATION SLOPE DATA UPDATED BY FIGURO SURVEY 2017.
6. HEADINGS INDICATED ARE RELATIVE TO STEERED TO NORTH.
7. FOR DETAILS OF TIE-INS AT PLATFORM AND SUBSEA WELL PLATFORM REFER TO DRAWING: ROND-W-YDAL-2002-0012, ROND-W-YDAL-2002-0005 AND ROND-W-YDAL-2002-0011.
8. AT SHALLOW WATER PLATFORM SPOOL AND NO TRENCHED FLOWLINE SECTION WILL BE PROTECTED BY MATTRESSES.
9. MINIMUM DISTANCE OF 100m BETWEEN FLOWLINE AND UMBILICAL (120m NOMINAL INCLUDING TOLERANCES) DUE TO DEW REQUIREMENTS.
10. FOR BUCKLE INITIATOR POSITION AND CONFIGURATION REFER TO ROND-W-YDAL-21-0001 / 0013.
11. PRE-INTERVENTION WORKS FOR TRENCHING PROFILE DETAILS REFER TO ROND-W-YDAL-21-0013/0013.
12. THICKNESS TO BE CONFIRMED WHILE MEETING INSULATION REQUIREMENTS IN ROND-W-YSDS-20-0031, TECHNICAL DATA SHEET FOR INSULATION.
13. REFERENCE ROND-EW-YSDS-21-0002, SPAN REPORT.
14. DEW PROPERTIES TO BE CONFIRMED DURING DETAILED DESIGN.
15. NOT APPLICABLE IN CASE OF BURIED PIPE.
16. TYPE OF BACKFILL TO BE CONFIRMED IN DETAILED DESIGN.

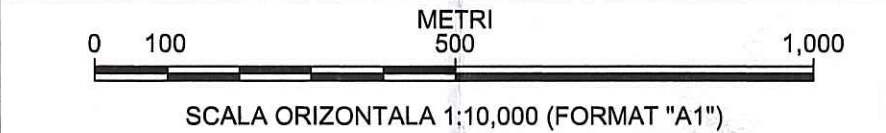
## DOCUMENTE DE REFERINTA

| NUMAR PLANSA               | DENUMIRE                                                                            |
|----------------------------|-------------------------------------------------------------------------------------|
| ROND-EW-YDLAY-22-0012      | PLAN ACCES SISTEM OMIBICAL LA DOMINO DODCI                                          |
| ROND-EW-YDLAY-22-0005      | PLAN ACCES SISTEM OMIBICAL LA DOMINO DODC2                                          |
| ROND-EW-YDLAY-22-0011      | ARANJAMENT ACCES CONDUCTA DE ADUCTIUNE SI CONDUCTA GAZE NATURALE LA PLATFORMA (SWP) |
| ROND-EW-YDLAY-22-0003/0008 | FISE ALINIAMENT SISTEM OMIBICAL DOMINO                                              |
| ROND-EW-YDPLX-21-0003/0004 | LUCRARI INTERVENTIE PRE-INSTALARE                                                   |

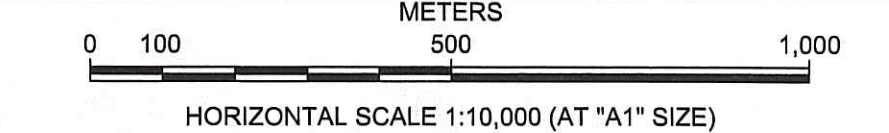
## REFERENCE DOCUMENTS

| DRAWING<br>NUMBER          | DESCRIPTION                                                         |
|----------------------------|---------------------------------------------------------------------|
| ROND-EW-YDLAY-22-0012      | DOMINO FLOWLINE WELL APPROACH LAYOUT DODC-1.                        |
| ROND-EW-YDLAY-22-0005      | DOMINO FLOWLINE WELL APPROACH LAYOUT DODC-2                         |
| ROND-EW-YDLAY-22-0011      | FLOWLINE AND PRODUCTION LINE PLATFORM (SWP)<br>APPROACH ARRANGEMENT |
| ROND-EW-YDLAY-22-0003/0008 | DOMINO UMBILICAL ALIGNMENT SHEETS                                   |
| ROND-EW-YDPLX-21-0003/0004 | DOMINO PRE-LAY INTERVENTION WORKS                                   |

## SCALA



## SCALE



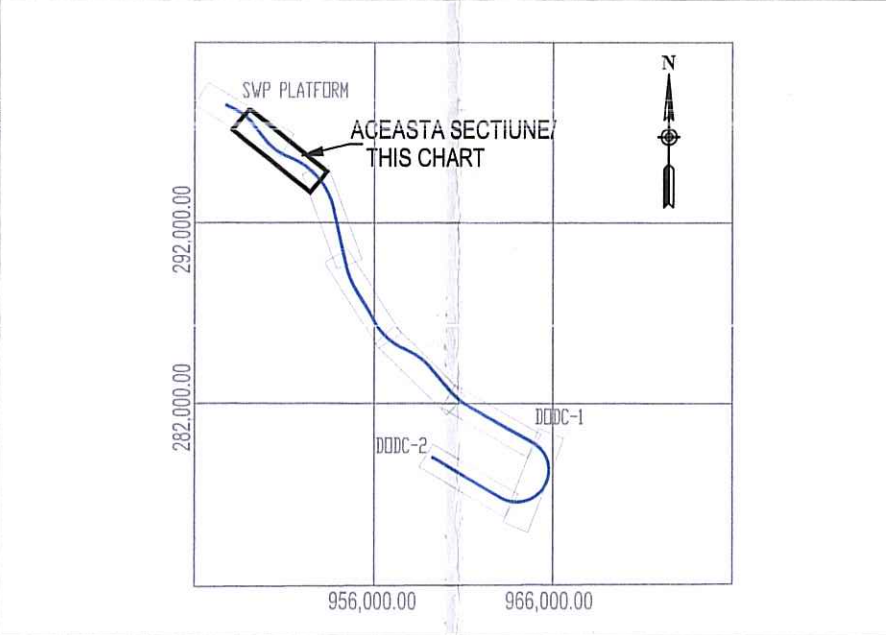
## PARAMETRI GEODEZIE SI DE PROIECTIE

|                         |   |                     |
|-------------------------|---|---------------------|
| DATE GEODEZICE          | : | STEREO 70           |
| PROIECTIE               | : | Dublu Stereografica |
| Meridianul central (MC) | : | 25.0                |
| Latitudine Origine      | : | 46.0                |
| Falsa origine estica    | : | 500.000.0           |
| Falsa origine nordica   | : | 500.000.0           |
| Factor de scala la MC   | : | 0.99975             |
| DATE VERTICALE          | : | MSL (NIVELUL MARI)  |

## GEODETIC & PROJECTION PARAMETERS

|                          |   |                      |
|--------------------------|---|----------------------|
| GEODETIC DATUM           | : | STEREO 70            |
| PROJECTION               | : | Double Stereographic |
| Central meridian (CM)    | : | 25.0                 |
| Latitude of Origin       | : | 46.0                 |
| False Easting at origin  | : | 500,000.0            |
| False Northing at origin | : | 500,000.0            |
| Scale factor at CM       | : | 0.99975              |
| VERTICAL DATUM           | : | MSL                  |

## PLAN DE REFERINTA/KEY PLAN



PROIECT NEPTUN DEEP  
NEPTUN DEEP PROJECT

|                        |            |                                                       |                      |                       |                         |
|------------------------|------------|-------------------------------------------------------|----------------------|-----------------------|-------------------------|
| 1-D                    | 12.03.2013 | EMIS PENTRU VERIFICARE<br>ISSUED FOR REVIEW           | M. DUMTRU            | C. STEFAN             | N. NEREMIA              |
| 1-C                    | 11.01.2012 | EMIS PENTRU VERIFICARE<br>ISSUED FOR REVIEW           | M. DUMTRU            | C. STEFAN             | N. NEREMIA              |
| 1-D                    | 29.05.2015 | EMIS PENTRU VERIFICARE<br>ISSUED FOR REVIEW           | O. MOISE             | C. STEFAN             | N. NEREMIA              |
| 1-D                    | 03.02.2012 | EMIS PENTRU VERIFICARE<br>ISSUED FOR REVIEW           | O. MOISE             | C. STEFAN             | N. NEREMIA              |
| REV<br>DEV<br>DATE     |            | DENUNȚIE, SCOPUL REVIZIEI<br>ISSUE, SCOPE OF REVISION | DENUNȚAT<br>PREPARED | PROIECTAT<br>DESIGNED | SEF PROIECT<br>APPROVED |
| VERIFICATOR<br>CHECKER |            |                                                       | I. BUTHNARIU         |                       | ANRE                    |

**NOTA / NOTE:**

Planşa este întocmită în sistemul de coordonate WGS 84. Coordonatele STEREO 70 au fost obţinute prin conversie, folosind metode electronice de calcul şi parametri specifici. Conversia presupune transformări (translatări, rotaţii şi/sau scalări) ale coordonatelor WGS 84.



Definiţiilor sunt documentele realizate în sistemul WGS 84. Acestea vor fi utilizate în scopul punerii în opera a proiectului. Documentele emise în sistemul STEREO 70 reprezintă răspunsul la cerinţele autorităţilor şi legislaţiei româneşti.

The plan is prepared in WGS 84 coordinate system. The STEREO 70 coordinates were obtained by conversion, using electronic calculation methods and specific parameters. The conversion involves transformations (translations, rotations and/or scaling) of the WGS 84 coordinates. The defining are the documents made in the WGS 84 system. These will be used for the purpose of implementing the project. The documents issued in the STEREO 70 system represent the answer to the requirements of the Romanian authorities and legislation.

Conform legislației românești, virgula și punctul sunt utilizate invers, pentru definirea zecimalelor. Dimensiunile în sistem US au fost definite astfel: Simbolul virgula a fost folosit pentru separarea cifrelor din interiorul numere care definesc sute, mii sau zeci în funcție de caz. Subunitățile de măsură (zecimalele) au fost separate prin punct. Prin urmare zecimalele vor fi cifrele din interiorul numerelor aflate după simbolul punct.

According to the Romanian legislation the comma and the point are used in reverse, for the definition of decimals.

The dimensions in the US system have been defined as follows: The comma symbol has been used to separate digit inside the numbers when the digit define hundreds, thousands or tens depending on the case. The digit of decimals are separated by a point. In according with the rules in Romania the coma and point are use in opposite way for defined the digit inside of number. For this reason all the digit inside of number after point will be read like decimals.

|                                                                                       |                                                                                                                                                                                                                                                                                |                                                                                       |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | <p>PROIECTANT / ENGINEERING CONTRACTOR<br/> <b>ILF CONSULTING ENGINEERS ROMANIA</b><br/>         STR. NEGRU VODA NR.10, 100149, PLOIESTI<br/>         J293071/2007, JO 22804820</p> <p><b>S.C. JEREMY PROMASTER S.R.L.</b><br/>         STR. CURCUBEULUI NR. 14A, PLOIESTI</p> |  |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|

|      |           |                   |      |     |     |         |
|------|-----------|-------------------|------|-----|-----|---------|
| 1    | 16OCT17   | RE-ISSUED FOR IFD | RO   | EP  | SS  | J       |
| 0    | 07JUL17   | ISSUE FOR IDC     | RO   | EP  | SS  | J       |
| REV. | REV. DATE | REV. DESCRIPTION  | ORIG | REV | APP | PRG APP |

**ExxonMobil**  
Exploration and Production  
Romania Limited

## CONDUCTA DE ADUCTIUNE DOMINO DOMINO FLOWLINE

# FISA ALIGNMENT ALIGNMENT SHEET

FISA 7 DIN 8  
SHEET 7 OF 8

|               |                         |    |                |             |
|---------------|-------------------------|----|----------------|-------------|
| 1 : 10,000    | ROND-EW-YDPAL-21-0011-C |    | DTAC           | 1-D         |
| SCALA / SCALE | NR. PLANSĂ / DWG. NO.   |    | FAZA / PHASE   | REV. / REV. |
|               | 16                      | 17 | A1+ (1092x594) |             |